

EUGENICS AND MILITARY SERVICE

By COLONEL C. H. MELVILLE, R.A.M.C., *Professor of Hygiene,*
Royal Army Medical College.

A COMPLETE description of the relation of eugenics to the various environmental factors in the community would involve the arranging of all trades and occupations in a scale of eugenic value. The question to be asked is how far each puts a premium on the qualities which enter into civic worth and, again, how far each provides a field for the exercise of these qualities in such manner as to achieve the rewards of efficiency, and to hold such a place in the community's estimation as to be advantageously placed for production of succeeding generations. In a scale of this kind military service would occupy a place of considerable interest. The object of this paper is to bring forward certain of the considerations which must enter into a judgment of its eugenic value.

Historically, military service has held the highest place among occupations in the estimation of the community, and its representatives have been consequently both highly selected by the rigours of the occupation and well placed for choice as progenitors of the future. Something in the ancient mode of struggle, at any rate, was related to the activities of the mating season among the lower animals, which resulted in the evolution of masculine strength and courage and the high esteem placed upon these qualities. For the whole of the period preceding history, and for most historical epochs in the life of active and dominant races, the test of efficiency has been conflict between men. Manhood and honour were primarily matters of the battlefield. The heroes of all the epics which furnished dominant ideals for long periods, were those whose warlike glory gave them favour in the eyes of the noblest women.

It is increasingly unfashionable to suggest that war has

anything of glory or that the soldier can be given higher credit than that of being a necessary evil. Two matters should, however, be borne in mind: that historically, through the selection of hardship and struggle and through that of the community's high esteem, warfare has brought men to such level of virility as they have attained; in the next place, that periods of peace and prosperity tend to hide an important undercurrent which always breaks out when danger threatens. The value of the soldier suddenly becomes what it was in past ages, and the nation realises that she expects to have citizens who, in case of need, are not only willing but able to fight for her.

An awakening of this character came, as is well known, at the time of the Boer War. It was realised that the country has need of qualities which make the efficient soldier. It was the fear of insufficiency in these qualities which brought about the enquiry into physical deterioration and the cult of physical training, which has grown by leaps and bounds in the last few years.

A military service is, therefore, eugenically useful because it keeps prominently before the community ideals of physical fitness and efficiency as well as of courage and patriotism. There does not appear to be in modern society any other fixed agency which emphasises these qualities in equal degree. It may be that an occasional war is of service by reason of the fact that in time of danger the nation attends to the virility of its citizens. Public opinion at such times will not tolerate the perpetuation of feebleness. In any prolonged period of peace soldiers tend to lose their hold on the imagination of the community and to be esteemed as puppets for parade on state occasions.

We will now proceed from this general consideration of military service as a eugenic agency to a description of the qualities found in the average recruit and what is accomplished with them through military training.

To begin with, then, let us consider what manner of man the intending recruit is, and the class of society from which he is drawn. Without going into details it may be said that considerably more than half the men who come up for enlistment

belong to the labouring class, unskilled labour that is. Somewhat over one-eighth come from the class of manufacturing artisans, and a lesser proportion from that of mechanics; that is smiths, carpenters, and masons, etc., whilst the balance is made up from shopmen, clerks, young men of the professional or student class, and boys under 17 years of age. By far the most important are the unskilled labourers, and the manufacturing artisans. The skilled mechanics to a great extent enlist for special reasons, to be employed as armourers or other artificers, or in the special branches of the Royal Engineers. For the ranks we do not as a matter of fact want skilled labour. The soldier is himself an expert, and, with a certain number of exceptions, the special trades that exist in a regiment, the armourers' shop, carpenters' shop and so on, it is no disadvantage for the recruit to be unskilled. Now it may be said at once that of the labouring class few, and of the class of manufacturing artisans still fewer, enlist when in steady employment. Some it is true do so because they have a friend or brother already in the ranks or because they have elder relations, father or uncles, who have been soldiers, who belong that is to a service family. These are the exception. The great majority enlist because work is hard to get outside, or because they are out of work. This is probably inevitable. Moreover, since service in the Army gives no certainty of permanent employment, the unskilled labourer with a good prospect of continuous work, much more the manufacturing artisan in a similar position, does not, and it is natural enough, see his way to throwing up a certainty for a necessarily temporary employment.

Of the men who come up for enlistment only a certain proportion are passed as fit for the service. In 1907, out of 56,393 men examined, 16,906 or between one-third and one-quarter were rejected as unsuitable for the Army. This proportion is rather lower than that for the ten years previous, when the rejected amounted to practically one-third of the total examined. Now I would like to point out that these figures prove very little as regards the actual physical condition of the poorer classes of the population as a whole, much less of the nation as a whole. We draw our men, as I have already told you, from what I may call

the lower fringe of the unskilled labour market. When trade gets bad the fringe ascends, a larger number of men, physically and socially of a better class, come up for examination, with the consequence that a smaller number are rejected. As trade improves this fringe descends in the social and physical scale, and we get fewer men of the good class coming up for examination with a consequently greater proportion of rejections.

A consideration of figures like the above is no justification for arguing, as I saw argued in an evening paper the other day, that "our women are no longer producing men who are fit to be soldiers." As long as we draw our recruits from the lower fringe of the unskilled labour market, as in a voluntary short service system we are bound to do, so long we must expect to see a large proportion of men rejected as unfit. Those who are not rejected mostly turn out decidedly fit to be soldiers, as the evidence of recent manœuvres shows. It would be more justifiable to argue that even under the least favourable conditions our women can produce men fit to be soldiers, and that if by increased pay, or other inducements, we should ever tap a higher social stratum we should find even better men and a larger proportion of them.

We now come to the made soldier. For two years he lives probably in some home station taking part in the ordinary work of the regiment he belongs to, and daily improving in physique and strength. Then his time comes to go abroad, where under ordinary circumstances he spends the next five years of his life. It is during the first two years that the strain of military life begins to tell. During the first three months the men are to a great extent nursed, but after that the training of the soldier has to be taken more in earnest, and it is only to be expected that a certain number of men will fall out under the additional strain. It must be remembered that the soldier works under very different conditions from the civilian. His work is probably not so hard, but it is certainly more incessant. In spite of every possible indulgence in the way of light duty, a time comes in the case of some men when it is realised that the original vice of under-feeding or some other inherent shortcoming has had effects too deep-seated to be eradicated whilst the man is undergoing

training. It is at this point that the keen but not too strong boy gives way. The proportion is not very great. In 1907 1.4 per cent. represents the number of men invalided in the Home Army, including men invalided on account of disease contracted abroad, tropical disease that is, and old soldiers. The number of men invalided under two years' service for disease contracted in or aggravated by military service is a good deal less than that figure: less we feel than half that number, say about six men in every 1,000, while the deaths are only about one in every 1,000.

How does this compare with the death rate of the civil population of the same age? The death rate of males in London between the years of 15 and 20 is (I quote from the last volume of London Statistics issued by the London County Council, Vol. XVIII., p. 40) 3.47 per 1,000. Compared with this the figure of 1 per thousand is very favourable to the Army. A certain allowance must be made for invaliding it is true, but the diseases for which men are invalided at this age are not as a rule of the rapidly fatal or even of the ultimately fatal class. Considerably more than half are included under the heads of Epilepsy, Chronic Ear Disease, Flat Feet, Defective Vision and so on, causes which can have no effect as regards the increase or diminution of the death rate. In fact it may be said that the only disease for which men are invalided with less than two years' service, the figures for which ought fairly to be added to the death rate, is Tubercular Disease, and if this be added the sum will only rise to 1.5 per 1,000, since the bulk of invaliding for this class of ailment falls on to the later years of service. And it must be remembered that we are here comparing the wastage rates of the Army with those of the males of the same age in all classes, not with those of the males of the same class as well as of the same age, which would be the only fair comparison. The death rate from phthisis in common lodging houses for the year 1906 was, for males between the ages of 25 and 35, 5.67 per 1,000.

An exact comparison is not possible, but I will later give you a few figures which point very strongly to the fact that the man who enlists in the Army has a much better chance of preserving

his life and health than his brother who remains in the ranks of casual labour.

I may be allowed here to describe briefly to those who are less familiar with the daily life of the soldier what conditions he lives under during the first two years of his work. In foreign stations the health conditions are not so favourable as in England, this, not because these conditions are bad in reality in India, but because they are so good in England. The death rate of soldiers in India is only about two-thirds of that of men of the same age living in common lodging houses in London, and this is the class from which the majority of the men come. Even if to the death rate we add the invaliding rate the total wastage of the Indian Army is not much higher than the death rate of this class, and the diseases for which men are invalided from India are, with the exception of phthisis and heart disease, not immediately nor even in the long run necessarily fatal. If we consider the men invalided for these two diseases as doomed, and add their figures to the death rate, even then the wastage of the Army in India is only five-sixths of that of the men of the same class at home who have not enlisted. And the conditions in India are yearly, I might say daily, improving. That great cause of death, enteric fever, works less havoc every year, and though it might be utopian to hope that we shall ever eradicate it entirely in that country, milk fever in Malta, cholera in India and enteric fever as we practically have at home, still I look confidently forward to a day when we shall no longer have to reckon with epidemics of the disease, but merely with isolated and sporadic cases. For most men their period of colour service comes to an end abroad, and they return home on discharge to the Reserve.

And now what manner of man is the Reservist?—the underfed, immature lad of seven years before? Well, here we have no figures to guide us and I must ask you to trust to my testimony of his character based on an experience of over twenty years in India, where one sees the British soldier at the latter end of his colour service just before passing into the Reserve. In the first place he is most emphatically *a man*. His worst detractor has never ventured to question that fact. Whatever other defects

he may possess that of want of manliness is never likely to be thrown in his teeth. And here at least is a great advance on his condition as a recruit, and a still greater advance on what he might have been expected to become if he had remained in the ranks of casual labour. I think if you ask any member of the Police Force, with experience of work amongst the classes which supply us with the bulk of our recruits, you will find that the result of service in the Army is in this respect of undoubted value. The Reservist is, I might say, infinitely superior in the quality of manliness to the loafer which he would in the majority of cases have otherwise become.

In addition he is a man accustomed to discipline and obedience, accustomed to the give and take of a barrack room, and accustomed too to the idea that a man cannot live entirely to himself but must sink his own private wants and tastes and live up to a standard set by the public opinion of his regiment or company, a public opinion that is invariably more elevated than the opinion of its average component members. I do not think I state the matter too strongly. I have seen the lad as a recruit, as a young soldier joining his regiment abroad, and as an old soldier leaving it for the reserve, and I confidently assert that the result of his service is to make the bad man good and the good man better. (I am using the words not in the sense of morality but of what the French call *morale*.) The recruit joins an under-fed, immature, rather feckless lad, and he leaves it a grown, self-reliant, self-respecting man. In the words that Mr. Kipling puts in the mouth of the soldier returned from S. Africa :

" I did no more than others did,
I don't know when the change began ;
I started as an average kid,
I finished as a thinking man."

And though Mr. Kipling is speaking more of the effects of a spell of active service the same is true, and hardly to a less extent, of the effects of an uneventful term of service with the colours.

Let me quote again, this time from Mr. Ruskin. He says in *The Two Paths*, written, it must be remembered, in 1859 :

" One of the chief reasons for the maintenance of an Army is the advantage of the military system as a method of education. The most fiery

and headstrong, who are often also the most gifted and generous of our youths, have always a tendency both in the upper and lower classes to offer themselves for your soldiers : others weak and unserviceable in the civil capacity are tempted or entrapped into the Army in a fortunate hour for them : and out of this fiery or uncouth material it is only soldier's discipline which can bring the full value and power. Even at present by mere force of order and authority the army is the salvation of myriads ; and men who under other circumstances would have sunk into lethargy or dissipation are redeemed into a noble life by a service which at once summons and directs their energies. How much more than this military education is capable of doing you will find only when you make it education indeed."

I should like to draw your attention again to the date when this was written, 1859. There can be no comparison between the conditions, moral and material, under which the soldier lived then and those under which he lives now. If what Mr. Ruskin said was true in 1859 it is infinitely more true now that fifty years have elapsed.